

Grade 4 Science
Week of October 5 – October 9

Animal Senses

Note If you have already completed this lesson in the beginning of September you may either skip this one or revisit it for a refresher

Animals use their perceptions and memory to guide their actions

In this section we'll look at how some animals use their senses in different ways. Remember, they have the same senses that we do, but they can do things that people can't!



Echolocation



Bats and some other animals use something called echolocation to navigate.

Animals use their ears, voice and echos to create a map that allows them to "see" in the dark.

We know sound moves in waves, when waves bounce off an object it is called an echo.

Bats use the echo and the wave lengths to sense how far an object is.



<https://youtu.be/laeE4icRYp4>

UV Sensors

To understand UV sensors we must first know what UV stands for, it stands for **ultraviolet**.

Butterflies, reindeer, scorpions and bees are all examples of animals that use ultraviolet sensors.

This is how a bee sees the world.



<https://youtu.be/N1TUDFCOwjY>



Magnetoreception

Did you know that the Earth is one big magnet?

Just like a magnet there is a negative side and a positive side. Some animals can see this magnetic pull and use it to navigate.

Birds use this magnetic field to fly south in the winter and fly back north for summer.



<https://youtu.be/4JUyMHOHb8>

Infrared Sensing



Infrared sensing is the ability to detect warm blooded animals.

Examples of infrared sensing animals are:

- vampire bats
- snakes
- mosquitoes



<https://youtu.be/wYxiffT7izY>

Now complete the following fill-in-the-blanks and questions on the next page.

1. Bats use _____ to “see” in the dark.

2. When using echolocation, a bat uses a combination of _____, _____, and echo’s to create a map of where they are.

3. How is an echo created?

4. UV stands for _____. What animals use UV sensors?

6. The earth is one big _____.

7. This means the earth has both a _____ and negative side (just like a magnet).

8. Birds can see _____ fields.

9. Infrared sensing means you can detect _____.

10. Animals that use infrared sensing are: